

CORE STABILITY EXERCISES

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Providing coaches, referees, players, and administrators with the knowledge, skills, and leadership abilities to ensure that safety and best practice principles are incorporated into all aspects of contact rugby.

INTRODUCTION

There are three phases of the core stability programme: Stage 1 – The *cognitive* stage; Stage 2 – The *associative* stage; and Stage 3 – The *autonomous* stage. Stage 1 is called the *cognitive* stage because it focuses on the retraining of the Transversus Abdominus muscle with conscious thought. The recruitment of the Transversus Abdominus is controlled directly by the brain and as a result there can be an immediate and measurable effect as a result of conscious activation. Stage 2 is the *associative* stage of the programme, which includes contraction of the Transversus Abdominus in conjunction with the activation of the more superficial abdominal muscles in order to strengthen the lower back musculature. Stage 3 is the *autonomous* stage because it focuses on unconscious activation of the Transversus Abdominus and the more superficial abdominal muscles whilst performing general conditioning and strengthening exercises. Each phase has varying levels of difficulty and has 16 categories of exercise.

It is important to perform each exercise in a slow and controlled manner. Form and function is the most important aspect of this programme and at no stage should quality be sacrificed for quantity. The number of repetitions is intentionally kept low to reduce the risk of an overuse injury and also to ensure that the stabilising muscles do not become fatigued. Think about each exercise carefully as the cognitive part of core stabilisation is very important. Ensure that you breathe continuously, exhaling on the effort phase of each exercise, as you would normally do with weight training. At no stage should you hold your breath. Core stability exercises are normally conducted without shoes; however if you are training in a gym environment it is important that you follow the rules and wear shoes. Consult a professional (physiotherapist/biokineticist) if you feel pain or discomfort at any stage.

The programme has three levels of difficulty: Beginner, Intermediate, and Advanced. Each level has three phases: *Cognitive, Associative,* and *Autonomous*. Each phase lasts four weeks and has three sessions in each week. Each session is designed to be a part of a normal training routine. The exercises can be performed in between the general gym exercises, or at the end of the session. If you have never done any core stability work before, it is advisable to start with the beginner programme. When you have finished the beginner programme you can progress to week five of the intermediate programme, the *associative* stage. If you have some experience with core stability you can skip the beginner stage and start with the intermediate programme. Once you have completed the intermediate programme you can progress to week five of the associative stage. If you are very experienced with core stability you can skip the beginner and intermediate phases and start with the advanced programme.

Try to include the stretches at the end of the programme (16.1 to 16.6) into your weekly workout. The six stretches are applicable for beginner, intermediate, and advanced levels. These stretches can be done once a week or every day, if you have a particular area that needs attention.

BEGINNER			
	Day 1	Day 2	Day 3
Cognitive Stage Week 1	Exercises 1.1 TA Supine 1.2 TA Marching 2.1 Pelvic tilt 2.2 Segmental bridge	Exercises 1.1 TA Supine 1.2 TA Marching 2.2 Segmental bridge 3.1 Fall out	Exercises 1.1 TA Supine 1.3 TA Prone 2.2 Segmental bridge 6.1 Supine opposite arm and leg
Week 2	Exercises 1.4 TA 4 Point 1.5 Knee lift 2.2 Segmental bridge 3.1 Fall out	Exercises 1.5 Knee lift 1.6 Knee and foot lift 2.3 Bridge with pelvic tilt 9.1 Cat stretch	Exercises 1.7 TA Advanced 4.1 Back extension 1 6.1 Supine opposite arm and leg
Week 3	Exercises 1.7 TA Advanced 2.3 Bridge with pelvic tilt 3.1 Fall out 5.1 Modified crunch 1	Exercises 1.7 TA Advanced 2.4 Single leg bridge 5.1 Modified crunch 2 9.1 Cat stretch	Exercises 1.7 TA Advanced 4.1 Back extension 1 6.2 Prone opposite arm and leg
Week 4	Exercises 1.7 TA Advanced 2.4 Single leg bridge 3.1 Fall out 5.1 Modified crunch 1	Exercises 1.7 TA Advanced 2.6 Segmental bridge on ball 5.1 Modified crunch 1 9.1 Cat stretch	Exercises 1.7 TA Advanced 4.1 Back extension 1 6.2 Prone opposite arm and leg
Associative Stage Week 5	Exercises 2.6 Segmental bridge on ball 5.2 Modified crunch 2 7.1 Knee plank 14.1 Lateral raise lunge	Exercises 5.3 Modified cross over crunch 8.1 Single leg push up 12.1 Standing twist	Exercises 2.9 Bridge with feet on ball 4.2 Back extension 2 6.2 Prone opposite arm and leg
Week 6	Exercises 2.9 Bridge with feet on ball 5.2 Modified crunch 2 7.9 Knee side plank 14.1 Lateral raise lunge	Exercises 5.3 Modified cross over crunch 8.1 Single leg push up 12.1 Standing twist	Exercises 2.10 Single leg bridge with feet on ball 4.2 Back extension 2 6.2 Prone opposite arm and leg

Week 7	Exercises 2.9 Bridge with feet on ball 5.6 Crunch on ball 7.1 Knee plank 14.1 Lateral raise lunge	Exercises 5.7 Decline curl 1 8.3 Decline push up 12.2 Abdominal twist	Exercises 2.10 Single leg bridge with feet on ball 4.2 Back extension 2 6.3 4 Point opposite arm and leg
Week 8	Exercises 2.11 Hamstring bridge with feet on ball 5.6 Crunch on ball 7.9 Knee side plank 14.2 Lunge	Exercises 5.7 Decline curl 1 8.3 Decline push up 12.2 Abdominal twist	Exercises 2.12 Single leg hamstring bridge with feet on ball 4.3 Back extension 3 6.3 4 Point opposite arm and leg
Autonomous Stage Week 9	Exercises 2.11 Hamstring bridge with feet on ball 5.11 Reverse crunch 1 7.2 Knee plank with arm lift 10.1 Forward med ball toss 10.2 Side med ball toss 14.2 Lunge	Exercises 5.13 Knee tuck 1 8.4 Decline ball push up 11.1 Oblique lean 12.4 Stability ball twist 13.3 Hanging pull up	Exercises 2.12 Single leg hamstring bridge with feet on ball 4.3 Back extension 3 6.3 4 Point opposite arm and leg 15.4 Balance
Week 10	Exercises 5.11 Reverse crunch 1 7.2 Knee plank with arm lift 10.1 Forward med ball toss 10.2 Side med ball toss 14.2 Lunge	Exercises 8.4 Decline ball push up 11.1 Oblique lean 12.4 Stability ball twist 13.3 Hanging pull up	Exercises 4.3 Back extension 3 5.13 Knee tuck 6.4 Stability ball opposite arm and leg 15.4 Balance
Week 11	Exercises 5.8 Decline curl 2 7.3 Plank 10.5 Overhead med ball toss 10.6 Single leg med ball toss 14.3 Leg lift lunge	Exercises 8.2 Push up twist 11.4 Med ball lean 1 12.3 Russian twist on ball 13.3 Hanging pull up	Exercises 4.4 Back extension on ball 4.5 Hip extension on ball 5.12 Reverse crunch 2 6.4 Stability ball opposite arm and leg 15.3 Wall running
Week 12	Exercises 5.8 Decline curl 2 7.3 Plank 10.5 Overhead med ball toss 10.6 Single leg med ball toss 14.3 Leg lift lunge	Exercises 8.2 Push up twist 11.4 Med ball lean 1 12.3 Russian twist on ball 13.4 Hanging pull up with ball	Exercises 4.4 Back extension on ball 4.5 Hip extension on ball 5.12 Reverse crunch 2 6.4 Stability ball opposite arm and leg 15.3 Wall running

When you finish the Beginner programme, move on to Week 5 (Associative stage) of the Intermediate programme

INTERMEDIATE				
Cognitive Stage	Day 1	Day 2	Day 3	
Week 1	Exercises 1.1 TA Supine 1.2 TA Marching 2.1 Pelvic tilt 2.2 Segmental bridge 3.2 Fall out with feet up	Exercises 1.1 TA Supine 1.2 TA Marching 2.2 Segmental bridge 2.3 Bridge with pelvic tilt	Exercises 1.1 TA Supine 1.3 TA Prone 2.3 Bridge with pelvic tilt 6.1 Supine opposite arm and leg	
Week 2	Exercises 1.4 TA 4 Point 1.5 Knee lift 2.4 Single leg bridge 3.2 Fall out with feet up 5.2 Modified crunch 2	Exercises 1.5 Knee lift 1.6 Knee and foot lift 5.3 Modified cross over crunch 9.1 Cat stretch	Exercises 1.7 Advanced TA 2.5 Single leg bridge with pelvic tilt 4.1 Back extension 1 6.2 Prone opposite arm and leg	
Week 3	Exercises 1.7 Advanced TA 2.4 Single leg bridge 3.2 Fall out with feet up 5.2 Modified crunch 2	Exercises 1.7 Advanced TA 2.5 Single leg bridge with pelvic tilt 5.3 Modified cross over crunch 9.1 Cat stretch	Exercises 1.7 Advanced TA 4.2 Back extension 2 6.2 Prone opposite arm and leg	
Week 4	Exercises 1.7 Advanced TA 2.6 Segmental bridge on ball 3.2 Fall out with feet up 5.7 Decline curl 1	Exercises 1.7 Advanced TA 2.7 Ball bridge with leg lift 5.13 Knee tuck 1 9.2 Cat curl	Exercises 1.7 Advanced TA 4.3 Back extension 3 6.3 4 Point opposite arm and leg	
Associative Stage				
Week 5	Exercises 2.6 Segmental bridge on ball 5.6 Crunch on ball 7.3 Plank 14.1 Lateral raise lunge	Exercises 2.7 Ball bridge with leg lift 5.11 Reverse crunch 1 8.1 Single leg push up 12.2 Abdominal twist	Exercises 4.4 Back extension on ball 4.5 Hip extension on ball 6.3 4 Point opposite arm and leg	
Week 6	Exercises 2.9 Bridge with feet on ball 5.6 Crunch on ball 7.10 Side plank 14.1 Lateral raise lunge	Exercises 5.11 Reverse crunch 1 8.2 Push up twist 12.2 Abdominal twist	Exercises 2.10 Single leg bridge with feet on ball 4.4 Back extension on ball 4.5 Hip extension on ball 6.3 4 Point opposite arm and leg	

Week 7	Exercises 2.11 Hamstring bridge with feet on ball 5.7 Decline curl 1 7.4 Plank arm lift 14.2 Lunge	Exercises 5.9 Leg lengthen 1 8.4 Decline ball push up 12.4 Stability ball twist	Exercises 2.12 Single leg hamstring bridge with feet on ball 4.4 Back extension on ball 4.5 Hip extension on ball 6.3 4 Point opposite arm and leg
Week 8	Exercises 5.8 Decline curl 2 7.11 Side plank drop 14.2 Lunge	Exercises 5.10 Leg lengthen 2 8.6 Med ball push up 12.4 Stability ball twist	Exercises 4.8 Dumbbell back extension 4.9 Dumbbell deadlift 6.4 Stability ball opposite arm and leg
Autonomous Stage Week 9	Exercises 5.8 Decline curl 2 7.5 Plank shoulder blade squeeze 10.1 Forward med ball toss 10.2 Side med ball toss 14.3 Leg lift lunge	Exercises 5.10 Leg lengthen 2 8.7 Stability ball shuffle 11.1 Oblique lean 1 12.3 Russian twist on ball 13.3 Hanging pull up	Exercises 4.8 Dumbbell back extension 4.9 Dumbbell deadlift 6.4 Stability ball opposite arm and leg 15.4 Balance
Week 10	Exercises 5.4 Crunch with feet up 7.13 Band side plank 10.5 Overhead med ball toss 10.6 Single leg med ball toss 14.3 Leg lift lunge	Exercises 8.5 Ball push up 11.2 Oblique lean 2 12.3 Russian twist on ball 13.4 Hanging pull up with ball	Exercises 4.8 Dumbbell back extension 4.9 Dumbbell deadlift 5.5 Cross over crunch with feet up 6.4 Stability ball opposite arm and leg 15.1 Mixed dumbbell raise
Week 11	Exercises 5.4 Crunch feet up 7.12 Stability ball side plank drop 10.1 Forward med ball toss 10.3Dynamic med ball toss 14.3 Leg lift lunge	Exercises 8.5 Ball push up 11.4 Med ball lean 12.5 Knee twist on stability ball 13.4 Hanging pull up with ball	Exercises 4.10 Good morning - bent leg 5.5 Cross over crunch with feet up 6.4 Stability ball opposite arm and leg 15.2 Lateral shift on ball
Week 12	Exercises 5.4 Crunch with feet up 7.6 Stability ball plank 10.3 Dynamic med ball toss 10.4 Reverse med ball toss 14.3 Leg lift lunge	Exercises 8.9 Dumbbell row 11.5 Med ball lean 2 12.5 Knee twist on stability ball 13.1 Pull up with mixed grip	Exercises 4.6 Kneeling back extension 1 5.5 Cross over crunch with feet up 6.5 Stability 4 point opposite arm and leg 15.3 Wall running

When you finish the Intermediate programme, move on to Week 5 (Associative stage) of the Advanced programme.

Compiling Store	Day 1	ADVANCED Day 2	Day 3
Cognitive Stage Week 1	Exercises 1.1 TA Supine 1.2 TA Marching 2.1 Pelvic tilt 2.2 Segmental bridge 3.3 Fall out with med ball	Exercises 1.1 TA Supine 1.2 TA Marching 2.2 Segmental bridge 2.3 Bridge with pelvic tilt 7.3 Plank	Exercises 1.1 TA Supine 1.3 TA Prone 2.4 Single leg bridge 4.1 Back extension 1 6.2 Prone opposite arm and leg
Week 2	Exercises 1.4 TA 4 Point 1.5 Knee lift 2.4 Single leg bridge 3.3 Fall out with med ball 5.2 Modified crunch 2 7.10 Side plank	Exercises 1.5 Knee lift 1.6 Knee and foot lift 5.3 Modified cross over crunch 8.1Single leg push up 9.1 Cat stretch	Exercises 1.7 Advanced TA 2.5 Single leg bridge with pelvic tilt 4.2 Back extension 2 6.2 Prone opposite arm and leg
Week 3	Exercises 1.7 Advanced TA 2.6 Segmental bridge on ball 3.3 Fall out with med ball 5.2 Modified crunch 2 7.4 Plank with arm lift	Exercises 1.7 Advanced TA 5.3 Modified cross over crunch 8.3 Decline push up 9.2 Cat curl	Exercises 1.7 Advanced TA 2.7 Ball bridge with leg lift 4.3 Back extension 3 6.3 4 Point opposite arm and leg
Week 4	Exercises 1.7 Advanced TA 2.7 Ball bridge with leg lift 3.3 Fall out with med ball 5.7 Decline curl 1 7.11 Side plank drop	Exercises 1.7 Advanced TA 5.11 Reverse crunch 1 8.4 Decline ball push up 9.2 Cat curl	Exercises 1.7 Advanced TA 2.8 Single leg bridge on ball 4.4 Back extension on ball 6.3 4 Point opposite arm and leg
Associative Stage Week 5	Exercises 2.9 Bridge with feet on ball 5.6 Crunch on ball 7.5 Plank shoulder blade squeeze 14.1 Lateral raise lunge	Exercises 5.4 Crunch with feet up 8.2 Push up with twist 12.2 Abdominal twist	Exercises 2.10 Single leg bridge with feet on ball 4.5 Hip extension on ball 6.4 Stability ball opposite arm and leg
Week 6	Exercises 2.9 Bridge with feet on ball 5.6 Crunch on ball 7.13 Band side plank 14.1 Lateral raise lunge	Exercises 5.5 Cross over crunch with feet up 8.6 Med ball push up 12.4 Stability ball twist	Exercises 2.10 Single leg bridge with feet on ball 4.8 Dumbbell back extension 4.9 Dumbbell deadlift 6.4 Stability ball opposite arm and leg

Week 7 Week 8	Exercises 2.11 Hamstring bridge with feet on ball 5.9 Leg lengthen 1 7.12 Stability ball side plank drop 14.2 Lunge Exercises 5.9 Leg lengthen 1	Exercises 5.10 Leg lengthen 2 8.7 Stability ball shuffle 12.3 Russian twist on ball Exercises 5.10 Leg lengthen 2	Exercises 2.12 Single leg hamstring bridge with feet on ball 4.6 Kneeling back extension 1 6.4 Stability ball opposite arm and leg Exercises 4.10 Good morning - bent leg
Autonomous Stazo	7.6 Stability ball plank	8.5 Ball push up	6.4 Stability ball opposite arm and leg
	14.2 Lunge	12.5 Knee twist on stability ball	15.4 Balance
Autonomous Stage Week 9	Exercises 7.7 Stability ball prayer plank 10.1 Forward med ball toss 10.2 Side med ball toss 14.3 Leg lift lunge 15.4 Balance	Exercises 5.8 Decline curl 1 8.9 Dumbbell row 11.2 Oblique lean 2 12.6 Full twist on stability ball 13.4 Hanging pull up with ball	Exercises 4.7 Kneeling back extension 2 5.12 Reverse crunch 2 6.5 Stability 4 point opposite arm and leg 15.1 Mixed dumbbell raise 15.5 Weights
Week 10	Exercises	Exercises	Exercises
	7.7 Stability ball prayer plank	5.8 Decline curl 1	4.11 Single leg good morning - bent leg
	10.5 Overhead med ball toss	8.8 Dumbbell push up	5.12 Reverse crunch 2
	10.6 Single leg med bal toss	11.3 Oblique lean 3	6.5 Stability 4 point opposite arm and leg
	14.3 Leg lift lunge	12.6 Full twist on stability ball	15.2 Lateral shift on ball
	15.4 Balance	13.1 Pull up with mixed grip	15.5 Weights
Week 11	Exercises	Exercises	Exercises
	7.8 Up and down plank	5.12 Reverse crunch 2	4.11 Single leg good morning - bent leg
	10.3 Dynamic med ball toss	8.10 Dumbbell push up row	5.14 Knee tuck 2
	10.4 Reverse med ball toss	11.5 Med ball lean 2	6.6 Single leg one arm row
	14.3 Leg lift lunge	12.6 Full twist on stability ball	15.2 Lateral shift on ball
	15.4 Balance	13.1 Pull up with mixed grip	15.5 Weights
Week 12	Exercises	Exercises	Exercises
	7.8 Up and down plank	5.12 Reverse crunch 2	4.12 Overhead squat
	10.3 Dynamic med ball toss	8.10 Dumbbell push up row	5.14 Knee tuck 2
	10.4 Reverse med ball toss	11.6 Hanging hip hike	6.6 Single leg one arm row
	14.3 Leg lift lunge	12.6 Full twist on stability ball	15.3 Wall running
	15.4 Balance	13.2 Stepped pull up	15.5 Weights

CATEGORIES

- 1. Transversus Abdominus (TA) Activation
- 2. Bridging Exercises
- 3. Fallout Exercises
- 4. Extension Exercises
- 5. Abdominal Exercises
- 6. Opposite Arm and Leg Exercises
- 7. Plank Exercises
- 8. Push Up Exercises
- 9. Cat Curl Exercises
- 10. Medicine Ball Exercises
- 11. Leaning Exercises
- 12. Twisting Exercises
- 13. Pull Up Exercises
- 14. Lunging Exercises
- 15. Other Exercises
- 16. Stretching Exercises

Key:

(E) = Essential

- (+) = Beginner
- (++) = Intermediate
- (+++) = Advanced

1) TRANSVERSUS ABDOMINUS (TA) ACTIVATION



1.1) TA Supine (1 set – 10 reps) (E)

Start: Lie on your back. Place your fingers 2 cm in and 2 cm down from the crest of your hips. **Movement:** No movement. **Action:** Draw in your pelvic floor (Cue for females: slow urine flow. Cue for males: lift scrotum). Lightly draw in belly button with 30 % effort. Hold muscle contraction for 10 s.



1.2) TA Marching (1 set – 20 reps) (E)

Start: Lie on your back. Draw in pelvic floor and belly button with 30% effort. **Action:** Maintain muscle contraction. Lift one leg up, pause and then return it to the start. Alternate legs. **Advanced:** Lift one leg up and keep it up, then lift the other leg up to meet it. Return one leg to the floor at a time.



1.3) TA Prone (1 set – 10 reps) (E)

Start: Lie on your stomach. **Movement:** No movement. **Action:** Draw in pelvic floor and belly button with 30 % effort.



1.4) TA 4 Point (1 set – 10 reps) (E)

Start: Hands underneath shoulders and knees underneath hips. **Movement:** No movement. **Action:** Draw in pelvic floor and belly button with 30 % effort.



1.5) Knee lift (1 set - 10 reps) (+)

Start: Hands underneath shoulders and knees underneath hips. **Action:** Draw in pelvic floor and belly button with 30 % effort. **Movement:** Lift knees 3 cm off floor. Hold for 10-15 s then return to the floor.



1.6) Knee and foot lift (1 set - 10 reps) (++)

Start: Hands underneath shoulders and knees underneath hips. Knees 3 cm off floor. **Action:** Draw in pelvic floor and belly button with 30 % effort. **Movement:** Lift foot 5 cm off floor. Hold for 3-5 s then alternate sides. After 4 x per side return to the floor.

1.7) Advanced TA (E)

Once you have mastered the exercises above then practice your pelvic floor and TA activation in other positions such as sitting or standing.

2) BRIDGE



2.1) Pelvic tilt (1 set – 10 reps) (E)

Start: Lie on your back. Movement: Slowly tilt/roll hips backwards to flatten out your lower back.



2.2) Segmental bridge (1 set – 10 reps) (E)

Start: Lie on your back with your feet hip distance apart. **Movement:** Use the pelvic tilt action, curling your spine and continue it slowly lifting your hips off of the floor (Cue: Move one vertebra at a time).



2.3) Bridge with pelvic tilt (1 set – 10 reps) (+)

Start: Hold bridge position. **Movement:** Tilt your pelvis to the side (drop one hip 2 cm lower). Return to the start and repeat on the other side. After repeating 2 x per side return to the floor.



2.4) Single leg bridge (1 set – 10 reps each side) (++)

Start: Straighten one leg so that your thighs are parallel. **Movement:** Use the pelvic tilt action, curling your spine and continue it slowly lifting your hips off of the floor (Cue: Move one vertebra at a time).



2.5) Single leg bridge with pelvic tilt (1 set – 10 reps each side) (+++)

Start: Hold single leg bridge position. **Movement:** Tilt your pelvis to the side (drop one hip 2 cm lower). Return to the start and repeat.



2.6) Segmental bridge on ball (1 set – 10 reps) (+)

Start: Place your head on a stability ball with your feet hip distance apart. **Movement:** Lower hips towards the floor (Cue: Move one vertebra at a time).



2.7) Ball bridge with leg lift (1 set – 10 reps each side) (+)

Start: Hold bridge position. **Movement:** Straighten out one leg, pause and then return it to the floor then alternate sides.



2.8) Single leg bridge on ball (1 set – 10 reps each side) (+++)

Start: Start in the bridge position. Keep one foot off the floor with a straight leg. **Movement:** Lower hips towards the floor (Cue: Move one vertebra at a time).



2.9) Bridge with feet on ball (1 set - 10 reps) (+)

Start: Lie on your back with your feet on a stability ball. **Movement:** Use the pelvic tilt action, curling your spine and continue it slowly lifting your hips off of the floor (Cue: Move one vertebra at a time).



2.10) Single leg bridge with feet on ball (1 set - 10 reps each side) (++)

Start: Hold bridge position with your feet on a stability ball. **Movement:** Lift one leg off the ball, pause then return it to the ball, and alternate sides.



2.11) Hamstring bridge with feet on ball (1 set - 10 reps) (+)

Start: Lie on your back with the soles your feet on a stability ball. **Movement:** Use the pelvic tilt action curling your spine and continue it slowly lifting your hips off of the floor (Cue: Move one vertebra at a time).



2.12) Single leg hamstring bridge with feet on ball (1 set – 10 reps each side) (++)

Start: Hold bridge position with your feet on a stability ball. **Movement:** Lift one leg off the ball, pause then return it to the ball, and alternate sides.

3) FALL OUT



3.1) Fall out (1 set – 10 reps each side) (E)

Start: Lie on your back, with your feet together and your knees together. **Action:** Draw in your pelvic floor and your belly button. **Movement:** Slowly shift your knees 3 cm to the side while keeping your body still. Return to the middle and then repeat on the other side.



3.2) Fall out with feet up (1 set -10 reps each side) (++)

Start: Lie on your back, with your feet up. **Action:** Draw in your pelvic floor and your belly button. **Movement:** Slowly shift your knees 3 cm to the side while keeping your body still. Return to the middle and then repeat on the other side.



3.3) Fall out with medicine ball (1 set – 10 reps each side) (+++)

Start: Lie on your back, with your feet up and a med ball between your knees. **Action:** Draw in your pelvic floor and your belly button. **Movement:** Slowly shift your knees 3 cm to the side while keeping your body still. Return to the middle and then repeat on the other side.

4) BACK EXTENSION EXERCISES



4.1) Back extension 1 (1 set – 10 reps) (E)

Start: Lie on your stomach with your hands in line with your ears. **Movement:** Lift your head and shoulders off the floor. (Cue: lift up one vertebra at a time)



4.2) Back extension 2 (1 set - 10 reps) (+)

Start: Lie on your stomach with your hands by your side. **Movement:** Lift your head and shoulders off the floor. (Cue: lift up one vertebra at a time)



4.3) Back extension 3 (1 set - 10 reps) (++)

Start: Lie on your stomach with your hands under your forehead. **Movement:** Lift your head and shoulders off the floor. (Cue: lift up one vertebra at a time)



4.4) Back extension on ball (1 set - 10 reps) (++)

Start: Lie on the stability ball with your hands by your ears. **Movement:** Lift your head and shoulders away from the floor. (Cue: lift up one vertebra at a time)



4.5) Hip extension on ball (1 set - 10 reps) (+)

Start: Lie on the stability ball with your hands underneath your shoulders. **Movement:** Lift both legs away from the floor.



4.6) Kneeling back extension 1 (1 set – 10 reps) (++)

Start: Kneel on the floor with your hands by your ankles. **Movement:** Lift your head and shoulders away from the floor. (Cue: lift up one vertebra at a time)



4.7) Kneeling back extension 2 (1 set - 10 reps) (+++)

Start: Kneel on the floor with your hands by your ears. **Movement:** Lift your head and shoulders away from the floor. (Cue: lift up one vertebra at a time)



4.8) Dumbbell back extension (1 set - 10 reps) (+)

Start: Stand upright with a dumbbell in each hand. **Movement:** Keeping a straight back lean forwards hinging from your hips and then return to the start.



4.9) Dumbbell dead lift (1 set - 10 reps) (+)

Start: Squat down low with a dumbbell in each hand. Keep your feet shoulder width apart. **Movement:** Stand up from the start position keeping your knees apart and your back straight.



4.10) Good morning (1 set – 10 reps) (++)

Start: Stand upright with a barbell across your shoulders. **Movement:** Bend forwards with a straight back, hinging from your hips.



4.11) Single leg good morning (1 set – 10 reps each side) (+++)

Start: Stand upright with one foot raised on a step and a barbell across your shoulders. **Movement:** Bend forwards with a straight back, hinging from your hips.



4.12) Overhead squat (1 set – 10 reps) (+++)

Start: Stand upright holding a barbell with a wide grip above your head. **Movement:** Squat down while keeping your arms still.

5) ABDOMINALS



5.1) Modified crunch 1 (1 set – 30 reps) (E)

Start: Lie on your back with your hands on your thighs. **Movement:** Lift up your head and shoulders until your fingers touch your knees.



5.2) Modified crunch 2 (1 set – 30 reps) (+)

Start: Lie on your back with your hands by your ears. Movement: Lift up your head and shoulders off the floor.



5.3) Modified cross over crunch (1 set – 30 reps) (+)

Start: Lie on your back with your hands by your ears. **Movement:** Lift up your head and shoulders off the floor while twisting your torso. Move your shoulder towards the opposite knee. Keep your elbows wide.



5.4) Crunch with feet up (1 set -30 reps) (++)

Start: Lie on your back with your feet up (knees and ankles together) and your hands by your ears. Movement: Lift up your head and shoulders off the floor.



5.5) Cross over crunch with feet up (1 set – 30 reps) (++)

Start: Lie on your back with your feet up (knees and ankles together) and your hands by your ears. **Movement:** Lift up your head and shoulders off the floor while twisting your torso. Move your shoulder towards the opposite knee. Keep your elbows wide.



5.6) Crunch on ball (1 set - 30 reps) (++)

Start: Lie on a stability ball with your hands across your chest. Your feet should be placed hip distance apart with you feet below your knees. Your position on the ball determines the level of difficulty. Lying at the front of the ball is the easiest while lying further back makes the crunch harder. **Movement:** Using your abdominals lift up your head and shoulders off the ball.



5.7) Decline curl 1 (1 set - 10 reps) (+)

Start: Sit up straight with your feet and knees spaced hip distance apart. **Movement:** Curl backwards slowly (Cue: move one vertebra at a time).



5.8) Decline curl 2 (1 set – 10 reps each side) (++)

Start: Sit up straight with your feet and knees spaced hip distance apart. **Movement:** Curl backwards slowly and at the same time twist your body by stretching your hand backwards. (Cue: move one vertebra at a time).



5.9) Leg lengthen 1 (1 set - 10 reps) (++)

Start: Lie on your back with both feet off the floor. **Movement:** Straighten one leg away from you while keeping the other leg bent. It is important to keep your back flat on the floor.



5.10) Leg lengthen 2 (1 set - 10 reps each side) (++)

Start: Lie on your back with both feet off the floor. **Movement:** Straighten one leg away from you while keeping the other leg bent. Twist your body taking your shoulder across towards your knee. It is important to keep your back flat on the floor.



5.11) Reverse crunch 1 (1 set – 10 reps) (++)

Start: Lie on your back with your feet off the floor. Movement: Lift your hips off the floor pulling your knees towards your chest.



5.12) Reverse crunch 2 (1 set - 10 reps) (+++)

Start: Lie on your back with your feet off the floor and a med ball between your knees. **Movement:** Lift your hips off the floor pulling your knees towards your chest.



5.13) Knee tuck 1 (1 set – 10 reps) (++)

Start: Place your hands shoulder width apart with your feet on a stability ball. **Movement:** Pull your knees in towards your chest while keeping your back flat.



5.14) Knee tuck 2 (1 set - 10 reps each side) (+++)

Start: Place your hands shoulder width apart with one foot on a stability ball. Movement: Pull your knee in towards your chest while keeping your back flat then return to the start.

6) OPPOSITE ARM AND LEG



6.1) Supine opposite arm and leg (1 set – 10 reps each side) (E)

Start: Lie on your back with your legs bent and your hands by your side. **Movement:** Straighten one arm above your head and at the same time straighten the opposite leg. (i.e. Left arm, right leg)



6.2) Prone opposite arm and leg (1 set – 10 reps each side) (+)

Start: Lie on your stomach with both arms straight above your head. **Movement:** Lift one hand off the floor and at the same time lift the opposite leg. (i.e. Left arm, right leg)



6.3) 4 Point opposite arm and leg (1 set – 10 reps each side) (+)

Start: Knees underneath hips and hands underneath shoulders. **Movement:** Straighten one arm above your head and at the same time straighten the opposite leg. (i.e. Left arm, right leg)



6.4) Stability ball opposite arm and leg (1 set – 10 reps each side) (++)

Start: Lie on a stability ball with your hands on the floor in line with your shoulders. **Movement:** Straighten one arm above your head and at the same time lift the opposite leg. (i.e. Left arm, right leg)



6.5) Stability 4 point opposite arm and leg (1 set – 10 reps each side) (+++)

Start: Place your hands and knees on a stability ball. **Movement:** Straighten one arm above your head and at the same time straighten the opposite leg. (i.e. Left arm, right leg)



6.6) Single leg one arm row (1 set – 10 reps each side) (+++)

Start: Balance on one leg holding a dumbbell in the opposite hand (i.e. Left arm, right leg). Keep the uninvolved arm and leg straight for balance. **Movement:** While keeping a flat back pull the dumbbell up towards your chest in a rowing action.

7) PLANK EXERCISES



7.1) Knee plank (1 set - 30 s or more) (+)

Start: Position your elbows under your shoulders. **Movement:** No movement. **Action:** Hold your body off the floor with the main pressure contact at your elbows and knees. Keep your back straight.



7.2) Knee plank with arm lift (1 set – 10 reps each side) (++)

Start: Position your elbows under your shoulders. **Movement:** Lift a bent arm above your head. **Action:** Hold your body off the floor with the main pressure contact at your elbows and knees. Keep your back straight.



7.3) Plank (1 set - 30 s or more) (++)

Start: Position your elbows under your shoulders. **Movement:** No movement. **Action:** Hold your body off the floor with the main pressure contact at your elbows and toes. Keep your back straight.



7.4) Plank with arm lift (1 set – 10 reps each side) (+++)

Start: Position your elbows under your shoulders. **Movement:** Lift a bent arm above your head. **Action:** Hold your body off the floor with the main pressure contact at your elbows and knees. Keep your back straight.



7.5) Plank with shoulder blade squeeze (1 set – 10 reps) (+++)

Start: Position your elbows under your shoulders. **Movement:** Slowly slide your shoulder blades together, pause, and return to the start. **Action:** Hold your body off the floor with the main pressure contact at your elbows and knees. Keep your back straight.



7.6) Stability ball plank (1 set – 30 s or more) (++)

Start: Position your elbows on the ball so they are under your shoulders. **Movement:** No movement. **Action:** Hold your body off the floor with the main pressure contact at your elbows (on the ball) and toes (on the floor). Keep your back straight.



7.7) Stability ball prayer plank (1 set - 10 reps) (+++)

Start: Position your elbows on the ball so they are under your shoulders. **Movement:** Roll the ball away from you as you straighten your arms. **Action:** Hold your body off the floor with the main pressure contact at your elbows (on the ball) and toes (on the floor). Keep your back straight.



7.8) Up and down plank (1 set - 10 reps each side) (+++)

Start: Position your elbows on the ball so they are under your shoulders. **Movement:** Place one hand on the ball followed by the other hand, until you are in a push up position. **Action:** Hold your body off the floor with your back straight.



7.9) Knee side plank (1 set - 15 s or more) (+)

Start: Position your elbow under your shoulder. **Movement:** No movement. **Action:** Hold your body off the floor with the main pressure contact at your elbow and knees. Keep your back straight.



7.10) Side plank (1 set - 15 s or more) (++)

Start: Position your elbow under your shoulder. **Movement:** No movement. Action: Hold your body off the floor with the main pressure contact at your elbow and feet. Keep your back straight.



7.11) Side plank drop (1 set – 10 reps) (++)

Start: Position your elbow under your shoulder. Keep your back straight. Movement: Lower hips towards the floor. Action: Hold your body off the floor with the main pressure contact at your elbow and feet.



7.12) Stability ball side plank drop (1 set – 10 reps) (+++)

Start: Place a stability ball between your ankles and position your elbow under your shoulder. Keep your back straight. **Movement:** Lower hips towards the floor. **Action:** Hold your body off the floor with the main pressure contact at your elbow and feet.



7.13) Band side plank (1 set - 10 reps) (+++)

Start: Position your elbow under your shoulder. Hold an exercise band with an outstretched arm and keep your back straight. **Movement:** Pull the band towards your chest in a rowing action. **Action:** Hold your body off the floor with the main pressure contact at your elbow and feet.

8) PUSH UP EXERCISES



8.1) Single leg push up (1 set - 10 reps) (+)

Start: Position your hands under your shoulders. **Movement:** Lower your upper body towards the floor while you keep your back straight.



8.2) Push up twist (1 set – 10 reps each side) (++)

Start: Position your hands under your shoulders. Movement: Lower your upper body towards the floor while you keep your back straight. Return to the start position and then twist your upper body by reaching your one hand to the ceiling. Return your hand to the floor and do another push up. Alternate sides.



8.3) Decline push up (1 set – 10 reps) (+)

Start: Position your hands under your shoulders. Movement: Lower your upper body towards the floor while you keep your back straight.



8.4) Decline ball push up (1 set – 10 reps) (++)

Start: Position your hands under your shoulders and your feet on a stability ball. **Movement:** Lower your upper body towards the floor while you keep your back straight.



Advance the exercise by placing your toes on the ball or lifting one leg off the ball.



8.5) Ball push up (1 set - 10 reps) (++)

Start: Place your hands on the stability ball and position them under your shoulders. **Movement:** Lower your upper body towards the ball while you keep your back straight. Advance the exercise by lifting one foot off the floor.



8.6) Med ball push up (1 set – 5 reps each side) (++)

Start: Start in a push up position with one hand on a medicine ball. **Movement:** Lower your upper body towards the floor while you keep your back straight. Push up your body and move the ball to the other hand. Advance the exercise by lifting one foot off the floor.



8.7) Stability ball shuffle (1 set – 4 reps i.e. two 180° turns in each direction) (++)

Start: Start in a push up position with your feet on a stability ball. **Movement:** Shift one hand to meet the other hand then continue moving around the ball. Advance the exercise by lifting one foot off the ball.



8.8) Dumbbell push up (1 set – 10 reps) (+++)

Start: Start in a push up position with a dumbbell in each hand. **Movement:** Lower your upper body towards the floor as you roll the dumbbells out to the side. Keep your back straight.



8.9) Dumbbell row (1 set - 10 reps each side) (+++)

Start: Start in a push up position with a dumbbell in each hand. **Movement:** Lift the dumbbell up towards your chest while keeping your back straight. Alternate sides.



8.10) Dumbbell push up row (1 set – 10 reps each side) (+++)

Start: Start in a push up position with a dumbbell in each hand. **Movement:** Lift the dumbbell up towards your chest while keeping your back straight. Alternate sides then lower your upper body towards the floor as you roll the dumbbells out to the side. 1 set means that you will do 20 rows in total (10 each side) and 10 push ups.

9) CAT CURL



9.1) Cat stretch (1 set – 10 reps) (E)

Start: Start in a 4 point kneeling position. Movement: Round your spine one vertebra at a time.



9.2) Cat curl (1 set - 10 reps) (++)

Start: Start in a 4 point kneeling position. Movement: Round your spine backwards one vertebra at a time taking your hips towards your heels. Return to the start and arch your spine in the opposite direction.

10) MED BALL TOSS



10.1) Forward med ball toss (1 set – 10 reps each side) (+)

Start: Stand facing forwards with your feet shoulder width apart and a medicine ball by your side **Movement:** Throw the med ball to a partner or against a wall. **Action:** Your upper body does the movement while your feet remain in the starting position.



10.2) Side med ball toss (1 set - 10 reps each side) (+)

Start: Stand side on with your feet shoulder width apart and a medicine ball by your side **Movement:** Throw the med ball to a partner or against a wall. **Action:** Your upper body does the movement while your feet remain in the starting position.


10.3) Dynamic med ball toss (1 set – 10 reps each side) (+)

Start: Stand side on with your feet shoulder width apart and a medicine ball by your side **Movement**: In one fluid movement shift your weight from the back foot to the front foot and throw the med ball to a partner or against a wall. Action: Your upper body does the movement and your feet remain in the starting position even though your legs move.



10.4) Reverse med ball toss (1 set – 10 reps each side) (++)

Start: Stand facing away from your target, with your feet shoulder width apart and a medicine ball by your side **Movement:** Turn and throw the med ball to a partner or against a wall. **Action:** Your upper body does the movement while your feet remain in the starting position.



10.5) Overhead med ball toss (1 set - 10 reps) (++)

Start: Stand with your feet shoulder width apart and a medicine ball above your head **Movement:** Throw the med ball to a partner or against a wall as you flex forward from your hips. **Action:** Your upper body does the movement while your feet remain in the starting position.



10.6) Single leg med ball toss (1 set – 10 reps each side) (++)

Start: Balance on one leg holding the medicine ball by your side **Movement**: Throw the med ball to a partner or against a wall. Action: Your upper body does the movement while your foot remains in the starting position.

11) OBLIQUE LEAN



11.1) Oblique lean 1 (1 set – 20 reps each side) (++)

Start: Cross your arms in front of your chest. Place your feet up against the wall with your hip on a stability ball. **Movement:** Keeping your back straight, lean to the side hinging from your hips.



11.2) Oblique lean 2 (1 set – 20 reps each side) (++)

Start: Place your fingertips by your ears. Place your feet up against the wall with your hip on a stability ball. **Movement:** Keeping your back straight, lean to the side hinging from your hips.



11.3) Oblique lean 3 (1 set – 20 reps each side) (+++)

Start: Extend your arms overhead and join your hands. Place your feet up against the wall with your hip on a stability ball. **Movement:** Keeping your back straight, lean to the side hinging from your hips.



11.4) Med ball lean 1 (1 set - 20 reps each side) (++)

Start: Kneel on the floor while holding a medicine ball above your head. **Movement:** Keeping your back straight, lean to the side hinging from your hips.



11.5) Med ball lean 2 (1 set - 20 reps each side) (++)

Start: Stand with your feet shoulder width apart while holding a medicine ball above your head. **Movement:** Keeping your back straight, lean to the side hinging from your hips.



11.6) Hanging hip hike (1 set – 15 reps each side) (+++)

Start: Hang from a pull up bar. **Movement:** Keeping your back straight and your upper body still, lift your legs to the side hinging from your hips.

12) TWIST



12.1) Standing twist (1 set – 20 reps each side) (+)

Start: Standing with your feet shoulder width apart and a medicine ball in your hands. **Movement:** Twist 180° to pass the ball to a partner (i.e. your left to their right). **Advance:** Twist 270° to pass the ball to a partner (i.e. your left to their left).



12.2) Abdominal twist (1 set - 10 reps each side) (+)

Start: Sit on the floor with your feet raised and a medicine ball in your hands. **Movement:** While keeping your feet off the floor twist the ball to the side. Return to the middle and then repeat on the other side.



12.3) Russian twist on ball (1 set - 10 reps each side) (++)

Start: Place your shoulders on a stability ball while you hold a medicine ball in your hands. **Movement:** Twist your upper body so that your shoulder is on the ball and the medicine ball is 90° from the starting position.



12.4) Stability ball twist (1 set – 10 reps each side) (++)

Start: Lie on your back and place a stability ball between your ankles. **Movement:** Twist the ball with your legs while keeping your upper body still.



12.5) Knee twist on stability ball (1 set - 10 reps each side) (++)

Start: Get into a push up position with your knees on a stability ball. **Movement:** Twist your lower body by moving the ball while keeping your upper body still.



12.6) Full twist on stability ball (1 set – 10 reps each side) (++)

Start: Get into a push up position with your feet on a stability ball. **Movement:** Twist your lower body, lifting one leg off the ball while keeping your upper body still.

13) PULL UPS



13.1) Mixed grip pull up (1 set – 10 reps each side) (++)

Start: Use an underhand grip with one hand and an overhand grip with the other. **Movement:** Pull your body up until your chin is above the bar. The pull up ends at the bottom when your arms are completely straight.



13.2) Stepped pull up (1 set – 10 reps each side) (+++)

Start: Use an overhand grip with one hand and hold a towel or rope with the other. **Movement:** Pull your body up until your chin is above the bar. The pull up ends at the bottom when the arm on the bar is completely straight.



13.3) Hanging pull up (1 set – 10 reps) (++)

Start: Use an overhand grip on a Smith Machine with your feet up on the bench. **Movement:** Pull your body up until your chest touches the bar. The pull up ends at the bottom when your arms are completely straight.



13.4) Hanging pull up with ball (1 set - 10 reps) (+++)

Start: Use an overhand grip on a Smith Machine with your feet up on a stability ball. **Movement:** Pull your body up until your chest touches the bar. The pull up ends at the bottom when your arms are completely straight.

14) LUNGES



14.1) Lateral raise lunge (1 set – 10 reps each side) (+)

Start: Stand on an exercise band in a lunge position, holding the ends of the band in each hand. **Movement:** Lift the band up to shoulder height.



14.2) Lunge (1 set - 10 reps each side) (+)

Start: Stand upright with your hands behind your head. **Movement:** Lunge forward keeping your hips level and your back upright.



14.3) Leg lift lunge (1 set – 10 reps each side) (++)

Start: Stand upright with your hands behind your head. **Movement:** Lunge forward keeping your hips level and your back upright. Follow through with the lunge by standing upright from the front leg and bringing the back leg up in front of your body. End the exercise with a reverse lunge to the start position.

15) OTHER



15.1) Mixed dumbbell raise (1 set - 10 reps each side) (+)

Start: Stand upright holding a dumbbell in each hand. **Movement:** Lift one dumbbell up to shoulder height in front of you while you lift the other dumbbell up to shoulder height at the side. Return to the start and alternate.



15.2) Lateral shift on ball (1 set – 10 reps each side) (+++)

Start: Place your head and shoulders on a stability ball. **Movement:** Shuffle your feet to the side shifting your body so that one shoulder is on the ball and the other is off the ball.



15.3) Wall running (1 set – 10 reps each side) (++)

Start: Balance on one leg while placing your other foot on the wall behind you. **Movement:** Bend the front leg slightly while keeping your back upright. Alternate arms in a running action as you bend or straighten your stance leg.



15.4) Balance (+ to +++)

Start: Balance on a stability ball. Kneel (double), kneel (single), sit, lie (single), lie (double), or stand. **Movement:** No movement. **Action:** The focus is on dynamic stability. It is not possible to remain completely still. Use minor adjustments to remain in control.



15.5) Weights (++ to +++)

Start: Lie on your back on a stability ball. Your head and shoulders should be supported on the ball. **Movement:** Perform exercises normally done on a flat bench on the ball. (e.g. Dumbbell bench press, dumbbell flies, dumbbell pullovers.)

16) STRETCHES



16.1) Glute stretch (1 set – 30 sec)

Start: Lie on your back. **Movement:** No movement. **Action:** Cross your leg over by placing your ankle on the opposite knee. Pull the opposite thigh towards your chest.



16.2) Hamstring and glute combo stretch (1 set – 30 sec)

Start: Lie on your back. Movement: No movement. Action: Pull your thigh towards your chest using your hands or a band.



16.3) Hamstring stretch (1 set – 30 sec)

Start: Lie on your back. **Movement:** No movement. **Action:** Keep your leg straight as you pull your leg towards your chest using a band. The opposite leg can be kept bent or straight. An alternative is to use a door frame in place of the band.



16.4) Spinal rotation (1 set – 10 reps each side)

Start: Lie on your side. **Movement:** Rotate your upper body as you stretch your hands as far away from each other as possible. Turn your head to look at your back hand. Hold this position for 5 s. **Action:** Keep the bottom knee in contact with the floor and both knees together throughout the movement.



16.5) Prayer stretch (1 set – 30 s)

Start: Kneel on the floor with your glutes on your heels. **Movement:** No movement. **Action:** Round your spine and stretch your hands out above your head.



16.6) *Hip flexor stretch* (1 *set* – 30 *s*)

Start: Kneel on the floor with your one foot forward and the opposite knee on a rolled up towel. Movement: No movement. Action: Move forward towards the front leg, as you would do with a lunge. Lean backwards with your body while pushing your hips forward. If you want to further enhance the stretch twist your torso and lean to the side of the front leg.







